



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,701	01/24/2002	Yuichi Iwase	SON-2315	7919

23353 7590 08/08/2003

RADER FISHMAN & GRAUER PLLC
LION BUILDING
1233 20TH STREET N.W., SUITE 501
WASHINGTON, DC 20036

EXAMINER

CHUNG, DAVID Y

ART UNIT	PAPER NUMBER
----------	--------------

2871

DATE MAILED: 08/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/053,701

Applicant(s)

IWASE ET AL.

Examiner

David Y. Chung

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 4, 5, 7-10 and 14 rejected under 35 U.S.C. 102(b) as being anticipated by Eida et al. (U.S. 5,909,081).

As to claims 1 and 7, Eida et al. discloses a multi-color light emission apparatus wherein light is emitted from an electroluminescent (EL) device. Note the embodiment of figure 5. Support substrate 2 has EL device 1 formed thereon. The EL device 1 comprises electrode 1c, organic compound 1b, and transparent electrode 1a. Transparent opposed substrate has fluorescent layer 3, color filter 9a, and black matrix 9b formed thereon. The two substrates are adhered together by a sealing means such as an adhesive.

As to claim 2 and 8, figure 5 of Eida et al. shows black matrix 9b on the surface of opposing substrate 8 facing support substrate.

As to claim 4, figure 5 of Eida et al. shows black matrix 9b comprised of a laminate film having a predetermined reflected-light-attenuation structure.

As to claim 5, in figure 5 of Eida et al., the electrodes 1c and black matrix 9b can be construed as alignment marks for properly aligning the two substrates prior to bonding them.

As to claim 9, in figure 5 of Eida et al., the black matrix 9b is disposed facing the spacing between the electrodes 1c in the step of adhering the two substrates together.

As to claims 10 and 14, the black matrix 9b and electrodes 1c serve as alignment marks. The black matrix 9b is aligned with the spaces between the electrodes 1c during the step of aligning the two substrates.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Eida et al. (U.S. 5,909,081).

As to claim 3, Eida et al. does not disclose an antireflection layer on the surface of the opposing substrate opposite the support substrate. However, antireflection layers were well known and obvious for reducing ghosting and other undesired optical effects in various display types. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide an antireflection layer in order to reduce ghosting and other undesired optical effects.

As to claim 6, Eida et al. does not disclose that the sealing adhesive becomes transparent when cured. However, most common types of adhesives used to bond substrates, such as epoxy resin become transparent upon curing. It was well known and obvious to use epoxy resin to bond substrates because it was cost-effective. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use a transparent adhesive resin such as epoxy resin because it was cost-effective.

3. Claims 11-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Eida et al. (U.S. 5,909,081) in further view of Miyamoto et al. (U.S. 6,039,896).

Eida et al. does not disclose adhering the two substrates together via an adhesive resin before curing the resin. However, Miyamoto teaches that when a thermoplastic resin type adhesive is used, it is not difficult to repair defects after bonding


Art Unit: 2871

because the uncured resin is easy to dissolve with a solvent. See column 2, lines 5-15.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to cure the resin after adhering the two substrates together in order to have the opportunity to correct alignment defects.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Chung whose telephone number is (703) 306-0155. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.


ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

David Chung
GAU 2871
07/28/03